



Division of Public Health Services

Public Health Preparedness Services

Bureau of State Laboratory Services

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FAX TRANSMITTAL SHEET

DATE: February 22, 2007

TO: Laboratory Director and QA Manager

FROM: Steven D. Baker, Office Chief
Laboratory Services
State Laboratory Services

Subject: Information Update #94

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NOTE: If any of the pages are missing, please call 1-800-952-0374, (602) 364-0734 or (602) 364-0733.

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*THIS MESSAGE AVAILABLE IN ALTERNATIVE FORMAT UPON REQUEST, BY CONTACTING:
Prabha Acharya AT (602) 364-0734.*

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Leadership for a Healthy Arizona



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Update #94

1. Clarification:

For drinking water, a total coliform test is required with either a subsequent fecal or E. coli test performed.

For AZPDES, APP and Reuse, it is permit specific.

- Most AZPDES permits are being reissued as E. coli. ADHS has approved Quantitray in wastewater, for testing only for those permits that specify E. coli (it does not test for the whole fecal coliform group).
- The APP regulations have just been changed and new permits can also be issued as E. coli, rather than fecal.
- At this time, all Reuse permits require fecal coliform only. ADEQ has told us that they will address this soon.

2. The guidance documents prepared by Lab licensure staffs on the method criteria for 8000C and 7000B/7010A will be posted shortly on ADHS website:

<http://www.azdhs.gov/lab/license/tech/infoup.htm>

3. Since the rules for licensing of environmental laboratories were approved on December 5, 2006, several methods have been Director approved. This was necessitated due to some omissions in the new licensure rules and also some new federal/state regulations. You can access these additional approved methods on the ADHS website: <http://www.azdhs.gov/lab/license/application.htm> and then selecting Part E – List of Director Approved Parameters.

4. All applicable licensure fees are due at the time of renewal which includes the application, methods and instrumentation, along with Proficiency Testing (\$130) and Information Update (\$136) fees.

5. Please Note: ADHS rules specifically include the EPA Drinking Water Manual as a reference, therefore making it legally binding under Arizona adopted rules. When analyzing drinking water samples, the laboratory must be compliant with the EPA DW Manual as well. When the manual and the referenced methods conflict, it is advised that the laboratory adopt the more stringent criteria from the references.

6. The following information was taken from the EPA Publication--Methods Update Rule, which can be accessed @ <http://www.epa.gov/waterscience/methods/update2003/mur-pre-pubfinal.pdf>
The above rule is projected to be made final in March of 2007, and is enforceable 30 days after publication.
- a. The rule withdraws liquid-liquid extraction (LLE) methods, including EPA Methods 612 and 625, as approved procedures for determination of 1,2-dichlorobenzene, 1,3- dichlorobenzene, and 1,4- dichlorobenzene (#36, page 17).
 - b. When any sample is to be shipped by common carrier or sent via the U.S. Postal Service, it must comply with the Department of Transportation Hazardous Materials Regulations (49 CFR Part 172; (Footnote 3, page 162).
 - c. An aqueous sample may be collected and shipped without acid preservation. However, acid must be added at least 24 hours before analysis to dissolve any metals that adsorb to the container walls (Footnote 19 on page 171). If the sample must be analyzed within 24 hours of collection, add the acid immediately within 15 minutes of sampling and transport at $<6^{\circ}\text{C}$; for specifics see footnote 2, page 161.
7. Procedure to check the heating block temperature: We thought the following information would be useful to the labs. This is in Section 11.2.3, in the EPA method 552.3 method:

11.2.3 Methylation of the method analytes is accomplished during this step. Careful control of both reaction time and reaction temperature are critical to method precision and accuracy.(9) Place the tubes in a heating block (or sand bath) at $50 \pm 2^{\circ}\text{C}$ (for MTBE) or $60 \pm 2^{\circ}\text{C}$ (for TAME) and heat for 2 hours (± 10 min). The tubes should fit snugly into the heating block to ensure proper heat transfer. Verify the reaction temperature by placing a thermometer into a tube containing water rather than inserting it into the block to ensure an accurate reading. Placing the thermometer directly in the heating block well or sand bath will give a higher temperature reading than the actual sample temperature.

Note: Mineral oil can be used in place of water for higher temperature readings.

8. For wastewater volatile methods, the sorbent materials and conditions can be altered if the IDC procedures described in the following e-mail is fulfilled.

"Dale Rushneck" <dale.rushneck@comcast.net> 3/21/2006 8:24 AM >>>
Hi Prabha

I spoke to Marion Kelly and Dick Reding of EPA last week and they suggest that AZDHS allow alteration of purge-and-trap conditions and materials in wastewater methods for determination of organic volatiles. Changes in purge-and-trap conditions and materials are not allowed in drinking water methods.

The concern about altering purge-and-trap conditions and materials, as we discussed week before last, is that if samples are analyzed by internal standard only, a decrease in recovery will be compensated by the internal standard and will, therefore, not be detectable. Therefore, any change in purge-and-trap conditions and materials should be tested using the external standard technique. EPA provided a set of tests for evaluating purge-and-trap performance in Section 7 of EPA Method 1624. These tests, or similar tests, should be performed to demonstrate good recovery of

the analytes under altered purge-and-trap conditions. After good recovery is demonstrated, the initial precision and recovery tests and other QC tests required by the method should be performed using the internal or external standard technique specified in the method. The alternate purge-and-trap conditions and/or materials can be used If all tests are performed and all QC acceptance criteria are met.

Please call or e-mail if you have further questions.

Dale

dale.rushneck@comcast.net

Phone: 970-223-2013

9. According to Richard Reding of EPA, the use of a collision cell for 200.8 (wastewater testing only) should be allowed because it overcomes an interference. The usual conditions apply; i.e., all QC tests must be performed and all QC acceptance criteria must be met with the collision cell as an integral part of the method. EPA's Office of Ground Water and Drinking Water is considering allowance for use of the collision cell but a decision has not yet been made. So, at present, the allowance applies to wastewater only.
10. **Training:** The Arizona Department of Health Services is planning on hosting another DMRQA Training this year on April 20th, 2007 at the State Health Laboratory located at 250 N. 17th Avenue.

The course will be taught by ERA and includes an Introduction to DMR-QA, Tests that are included in the DMR-QA, Technical Overview of Analyses, and DMR-QA Study Pathways. The Arizona DMRQA Coordinator will be on hand to assist in answering state specific questions during the Q & A at the end of the course.

There is a fee to attend the course, which will be provided at a later date. In addition, we are working to have Professional Development Hours offered for the course.

Questions or comments, please contact Kathryn Wangsness at (602) 364-0724 or wangsnk@azdhs.gov

11. Please contact Prabha Acharya @ (602) 364-0734 or acharyp@azdhs.gov for any technical or method related questions. The earlier Information Updates can be accessed @ <http://www.azdhs.gov/lab/license/tech/infoup.htm>